DATE 2-8-89

AD-A204 561

TO: Information Services Branch

FROM: Computer Products Support Group ___DS___
                                        (Init)   (Init)   (Init)

RE: DOD/sw/DK-89/004 .   Announce in GRA&I
            (Report No.)

Priority Action is Required

Attached

☑ Form NTIS 231.

☑ Form NTIS FCPC 01   (Form 277)

☑ NTIS 79

☑ RDP (OF 272)

☐ Proof Listing

☐ Consigned Inventory Acquisition
     Form (Interagency Agreement
     Number and Split)

Process for:		
K File (Data)	☐ Documentation	
	☐ Diskette	
H File (Software)	☑ Documentation	
	☑ Diskette	

Action

☐ Loan Document Form Attached

☑ Defense Sponsored: Acquire ADA Number

☐ Order Pending. Return immediately after copying
     necessary pages.

DTIC
ELECTE
FEB 2 7 1989
S
D
αD

Remarks

Documentation from DOD/sw/DK-89/003a needs
to be included with this package.

Highlight

Computer Products Transmittal

89   2   24   035

ADA 204 561

☐ DELETE   ☒ NEW   ☐ REPLACE   ☐ CORRECTION

NTIS COMPUTER PRODUCTS CATALOG DATA SHEET	1. ACCESSION NO.	2. CONTRIBUTING AGENCY REPORT NO.	3. SUBJECT
		✓ DOD/SW/DK-89/004	

4. PRODUCT *(circle one)*

DATA FILE   PUBLICATION

DATA BASE REFERENCE SERVICE   (SOFTWARE)   MODEL, SIMULATION

5. AGENCY, BUREAU, DIVISION, AND ADDRESS

Department of Army
The Hydrologic Engineering Center, Corps of Engineers
609 Second Street
Davis, California 95616

6. PRODUCT NAME *(Use agency nomenclature)*

HEC-1, Flood Hydrograph Package (for Microcomputers)

7. DESCRIPTORS OF PRODUCT *(Keywords, identifiers, etc.)*

*Software, Diskette

Surface Water Hydrology, Flood Hydrograph, Surface Runoff Response,
Rainfall-Snowfall-Snowmelt Determination,
Computer Program

8. DATES OF COVERAGE *(For one-time reports, use as-of-date; for software, use date and release no.)*

Version Jun 88

9. FILE SIZE IN NO. OF:

|3| Diskettes   PUNCHED CARDS

10. AVAILABILITY STATEMENT - AGENCY NAME AND ADDRESS, ORDER NO., ETC. *(If NTIS sells, leave blank)*

11. PRICE INFORMATION

125.00

Price code: ~~$~~ D03   ~~$60.00~~ (domestic)   Price includes documentation:
$120.00 (foreign)

12. GEOGRAPHIC SCOPE

None

13. TECHNICAL REPRESENTATIVES *(List at least one for subject and one for media)*

NAME	TITLE	PHONE NO.
Gary Brunner		(916) 551-1748
David Goldman		(916) 551-1748
Arlen Feldman		(916) 551-1748

MT. 60 Dom.
120 For.
NTIS

14. DOCUMENTATION

☒ AVAILABLE as:

EXPECTED AVAILABILITY DATE

NA

DTIC
USCOMM-DC 9411-P74
COPY
INSPECTED

A-121

15. COMPUTER PRODUCT ABSTRACT

HEC-1 is a mathematical watershed model designed to simulate the surface runoff response of a river basin to precipitation by representing the basin as an interconnected system of hydrologic and hydraulic components. Each component models an aspect of the precipitation-runoff process within a portion of the basin. A component may represent a surface runoff entity, a stream channel or a reservoir, defined by parameters specifying its characteristics and the mathematical relations describing the physical processes. The result of the modeling process is computation of streamflow hydrographs at desired locations in the river basin. All ordinary flood hydrograph computations associated with a single recorded or hypothetical storm can be accomplished with this package. Capabilities include rainfall-snowfall-snowmelt determinations, computations of basin precipitation, unit hydrographs, kinematic wave transforms, and hydrograph; routing by reservoir, storage-lag, multiple storage, straddle-stagger, Tatum, Muskingum, and kinematic wave methods; and complete stream system hydrograph combining and routing. Best-fit unit hydrograph, loss-rate, snowmelt, base freezing temperatures and routing coefficients can be derived automatically. Automatic printer plot routines are also provided. HEC-1 may also be used to simulate flow over and through breached dams. Expected annual flood damage can be also be computed for any location in the river basin. ...Software Description: The program is written in FORTRAN 77 for implementation on IBM PC/XT compatible equipment, using MS/PC DOS 2.1+ operating system. Minimum of 640 K bytes core. Two 5¼" floppy disk drives, or one 5¼" floppy disk drive and a 10 MB hard disk Math coprocessor (8087, 80287, 80387) highly recommended but not required. Hard disk is required to run MENU1. (JES)

16. DATA FILE TECHNICAL DESCRIPTION

The software is contained on __5¼__ -inch diskette(s), __double__ density (360K), compatible with the __IBM PC/XT__ microcomputer. The diskettes are in the __ASCII__ format.

17. SOFTWARE TECHNICAL DESCRIPTION

Software is written in;

Fortran __X__ COBOL ____ Basic ____ Assembly ____ Other (Specify) ___ FORTRAN 77 _____

Software requires;

CPR Mfr. __IBM PC__ Model(s) __XT__ Operating system(s) __MS/PC DOS 2.1+__

Minimum of __640__ K bytes core. The following special features and/or additional requirements in hardware:
Two 5¼" floppy disk drives, or one 5¼" floppy disk drive and a 10 MB hard disk. Math coprocessor (8087, 80287, 80387) highly recommended but not required. Hard disk is required to run MENU1.

SIGNATURE OF AGENCY REPRESENTATIVE, PHONE NO., AND DATE	SIGNATURE OF NTIS REPRESENTATIVE AND DATE FORM PREPARED

COMPUTER MAGNETIC TAPE FILE PROPERTIES

01. Completion Date	02. Form Prepared By (Name and Phone)	03. Reel ID Number (Property Control No.)
Year | Month | Day	Vernon R. Bonner	

04. Recording Date	05. File Identifier or Descriptive Title	06. Short Title (External Label Name)
Year | Month | Day	HEC-1, Flood Hydrograph Package	HEC-1

07. Source Unavailable	08. Documentation	09. File Position on Reel
Year | Month | Day	Yes | No | Available — No [X] (Enter Citation)	____ of ____

10. To Be Returned	11. Submitting Organization & Address	12. Receiving Organization & Address
Yes | No [X] To Other Than The Sender	Department of Army The Hydrologic Engineering Center Corps of Engineers 609 Second Street Davis, California 95616	United States Department of Commerce National Technical Information Service 5285 Port Royal Road Springfield, Virginia 22161

13. Due Back Date
Year | Month | Day

14. Technical Contact(s) & Phone Number(s)

Gary Brunner, David Goldman, Arlen Feldman (916) 551-1748

RECORDING SYSTEM CHARACTERISTICS

EQUIPMENT MANUFACTURER AND MODEL	15. Processing Unit IBM PC or compatibles	17. No. of Tracks			18. Parity		19. Density (BPI)
		7	9	Other	Odd	Even	
	16. Tape Subsystem						

RECORDING SOFTWARE	20. Operating System, Release & Version MS DOS 2.1 or greater	22. Internal File Identifier
	21. Utility Program or Data Base Language PKXARC.COM (included) used to de-archive files with .ARC extens.	

23. Characters Set (Graphics)
[X] ASCII [ ] BCD [ ] Other (Specify)
[ ] EBCDIC [ ] FIELDATA [ ] Non-Print Codes

24. Recorded Label (Internal Label)
[ ] Header [ ] ANSI X 3.27 Standard [ ] Other
[ ] Trailer [ ] FIPS Standard [X] None

FILE CHARACTERISTICS

NUMBER OF RECORDS	25. Physical	27. Record Type	28. Records/Block (Blocking Factor)	29. TYPE OF FILE ORGANIZATION (Check One Box)
	26. Logical	[X] Fixed Length [ ] Other Than Fixed	1	[ ] One File One Reel [ ] One File Multiple Reels

RECORD LENGTH	30. Physical 80 [X] Bytes [ ] Chars. [ ] Words (Bits/Word)	[ ] Multiple Files One Diskette
	31. Logical [ ] Bytes [ ] Chars. [ ] Words (Bits/Word)	[X] Multiple Files Multiple Diskettes

SUPPLEMENTAL INFORMATION

32. Use/Handling Constraints (Specify if Yes)
Yes | No [X]

33. For Submitting Organization Use

HEC-1 is provided on three 5¼" double-sided 360 KB floppy diskettes, as follows:
(1) INSTALL1 - installation program; (2) COED - Corps of Engineers full-screen editor;
(3) HEC1 - program files, implementation guide (file README.DOC).